Serial No. 10/812,105 Docket No.: 1572.1249

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 8-16 and 18-19, as follows.

1. (ORIGINAL) A gateway comprising a first port connected to a network and a second port connected to a target node and being employed for a data stream between the network and applications of the target node, the gateway further comprising:

a storage unit to store an IP address of the target node;

an MAC address converter to set an MAC address of the target node as an MAC address of the first port;

a controller to set an IP address of the second port based on an IP address of the target node, and to read the MAC address of the target node through the second port and set the IP address of the target node as an IP address of the first port; and

a router to set a transmission route and transmit data to the IP address of the target node without a local loop back process, in response to the IP address of the target node and the IP address of the first port being the same.

2. (ORIGINAL) The gateway according to claim 1, further comprising:

a data processor to intercept the data stream, and then process the data stream or make and transmit a new data stream;

a filter information table to store information about process port numbers used by the data stream required to be processed in the data processor; and

a filter transmitting only the data stream required to be processed to the data processor, based on the information stored in the filter information table.

3. (ORIGINAL) The gateway according to claim 1, wherein the MAC address of the target node is read by requesting an ARP to the target node through the second port.

4. (ORIGINAL) The gateway according to claim 1, wherein an address resolution protocol (ARP) is used by the controller to read the MAC address of the target node through the second port.

5. (ORIGINAL) The gateway according to claim 1, wherein the controller deactivates the second port and activates the first port to set the IP address of the target node as the IP address of the first port, and then activates the second port.

6. (ORIGINAL) The gateway according to claim 1, wherein the second port is directly connected to the target node through a local area network (LAN) cable.

7. (ORIGINAL) The gateway according to claim 1, wherein the storage unit comprises a nonvolatile memory.

8-16. (CANCELED)

17. (PREVIOUSLY PRESENTED) A gateway connected to a network, through a first port, and a target node, through a second port, wherein the gateway is linked to an IP address of the target node, and intercepts and processes a data stream between the network and the target node, and then transmits the data stream to a destination, with the gateway setting a transmission route and transmitting data to the IP address of the target node without a local loop back process, in response to the IP address of the target node and the IP address of the first port of the gateway being the same.